1/30/92
170073

WORK PLAN REVISION
REVISED FOR PREDESIGN SCOPE, BUDGET, AND SCHEDULE

Based on the interpretation of the new requirements of the 1986 amendments to CERCLA the objectives of the predesign have expanded significantly. The intent of a predesign is that it should be complete enough such that a budget estimate can be developed in the range of +30 -15. This necessarily includes borings for foundations or collection systems, pump tests, topographic mapping for plan sheets and bench- and pilot-scale tests of treatment systems.

The following revised task descriptions amend the existing scope of work.

TASK QS--QUALITY ASSURANCE PROJECT PLAN

The additional sampling for geotechnical, hydrogeological and supplemental field investigations will require the preparation of a QAPP to define objectives and analytical reporting requirements for this effort.

The additional sampling required for bench-scale and pilot testing of the treatment system will require the preparation of a QAPP. Analysis of influent and effluent samples is required not only for CLP standard organic and inorganic packages but also for nutrient parameters which are needed for discharge limits. A QAPP for this sampling effort is needed to define objectives and sampling and analytic reporting requirements.

TASK FM--SITE TOPOGRAPHIC MAP AND PRELIMINARY LAYOUTS

Since NSL has been actively accepting and disposing of wastes since 1983, a revised topographic map of the site including ECC, potential borrow areas north of the landfill, and unnamed ditch and Finley Creek needs to be prepared. This information is needed for plan sheets for the cap, leachate and groundwater collection system, rerouting of the ditch and creek and treatment plant location.

The specific requirements for this effort are:

- Aerial photography will be obtained from an altitude to enable mapping of the landfill area at 1" = 50' for use in the predesign activities. Specifications for obtaining the aerial photography, surveying, and mapping services will be prepared.

- Ground surveys shall be performed to obtain ground control for photogrammetric mapping purposes and

to obtain additional ground information needed for the predesign phase of the project.

The surveyors shall place panels (aerial targets) at preselected locations on and around the site prior to the aerial flight for control purposes. An inspection will take place within 1 hour prior to the flight to verify the existence of the control panels.

- Prepare photogrammetric mapping of approximately 200 acres at a scale of 1" = 50' with a 1-foot contour interval. The mapping will contain all planimetric and topographic features within the selected site boundaries.

  The photogrammetric mapping will be drafted by using scribing techniques and produce final design sheets with mapping onto standard 22" x 34" sheets containing appropriate title block information.

TASK FQ--GEOTECHNICAL/HYDROGEOLOGICAL

The depths and alignment of the groundwater interception trench and leachate collection system (french drains), and the characterization of the borrow area, and needed structures for the recommended alternative have only been evaluated as to their feasibility. Subsurface data is required to specifically define soil conditions related to the stability of the floors and walls of trench excavation, characteristics of the anticipated borrow areas to be used for fill and or capping and structural requirements of buildings. Approximately 8 to 10 borings and 20 to 30 cone penetrometer soundings will be completed along the proposed groundwater interceptor alignment. Borings will be located at about 500-foot intervals and cone pentrometer sounding will be at 150-foot intervals. Each boring will have a total depth of about 60 feet and be sampled with standard split-spoons at 2-1/2-foot intervals to identify the depth and thickness of sand and gravel lenses along the interceptor alignment. Up to 10 borings will be selected along the alignment for piezometer installations to be used to monitor groundwater levels under static and pumped conditions.

The potential borrow area north of NSL will be investigated using 10 to 12 borings approximately 25 feet deep. In addition 8 to 10 test pit excavations of 8 to 10 feet deep and 15 to 20 cone penetrometer soundings will be made. This will provide a two-dimensional view of subsurface conditions. Three to five piezometers will be installed to monitor groundwater levels in the proposed borrow area.

In addition to the interceptor and borrow area investigations, the existing landfill cap will be investigated in 15 to 20 places for soil density.

Three test pits will also be excavated along the proposed realigned section of Finley Creek to provide information for excavation requirements.

The characteristics of the water bearing units to be intercepted need to be better defined relative to potential yield and drawdown, which will be accomplished by pump tests. The proposed pump tests will provide values of aquifer transmissivity and storativity that will be used during design for estimating construction dewatering requirements, and the potential yield of the proposed interceptor, and drawdown along the groundwater interceptor trench. Two wells will be installed, one near the southwest corner of NSL east of unnamed ditch and one south and near the midpoint of NSL north of Finley Creek. Each well will be tested individually by pumping and measuring water levels in surrounding piezometers and monitoring wells, for minimum duration of 24 hours to a maximum of 72 hours. Each test will be run until the cone of depression around the pumped well approaches steady-state conditions. Extracted water will be treated with GAC prior to discharge.

TASK F1--SUPPLEMENTAL FIELD INVESTIGATIONS

This task is to supplement existing information and to characterize the nature and extent of the other source area mentioned in the Record of Decision (ROD) dated September 25, 1987, relative to the location of the groundwater interception system.

Approximately 64 detailed soil borings will be advanced to a depth of 18 to 20 feet on on 30 to 40 foot centers in the area bounded roughly buy ECC on the north, unnamed ditch on the east and the new pond on the west, and Finley Creek on the south. The borings will consist of continuous split-spoons. Approximately 10 to 15 new monitoring wells will be installed in the area of the boring program. The boring program may necessitate the draining of the pond.

TASK PT--BENCH-SCALE AND PILOT PLANT TESTING

The bench-scale testing is needed to evaluate effectiveness of the proposed or other treatment process, and flocculation and clarification requirements.

The pilot plant testing will consist of unit processes necessary to determine the effectiveness of and possible performance of a proposed treatment systems. A detailed

scope of work for this effort will be prepared after the influent characterization is completed.

TASK WP--WORK PLAN

This task is to be used to refine the work plan for the pilot test tasks once the influent characterization and bench scale tasks are completed.

TASK QC--INTERNAL QUALITY CONTROL REVIEW

Periodic review of project files and project deliverables will be conducted by a review team selected to maintain quality control throughout the project. Also, ongoing consultation between the project team and the review team will occur as needed. The team will consist of three professionals with experience from appropriate disciplines related to the project.

TASK PM--PROJECT MANAGEMENT

Project management during the project will include the following:

- Work with U.S. EPA to plan the project including scope definition, budgeting, and scheduling.
- Keep U.S. EPA informed of project status.
- Budgeting and schedule control.
- Maintain project quality control and assurance programs.
- Prepare monthly progress reports, activity completion reports, and technical and financial status reports.

TASK R7--PREDESIGN REPORT

The objective of this task is to prepare a report describing the engineering parameters and provide pertinent project information for transferring the project to the design party.

The draft report summarizing the predesign data will be prepared and submitted to the U.S. EPA and state. Following receipt of written comments on the draft, the report will be finalized. Approximately 30 copies will be provided to the U.S. EPA and state for distribution to appropriate personnel.

Project Team

Table 1 presents the dates for the deliverables of the predesign. Figure 1 represents the organization chart of the personnel anticipated to work on the NSL/ECC CAA Predesign.

Schedule

The proposed schedule for the predesign is presented in Figure 2. As shown in Figure 2, the overall civil engineering effort is anticipated to require a 41-week effort. The treatment effort is anticipated to require a 66-week effort. With this schedule the design of the civil engineering elements for the NSL/ECC site remediation could commence as early as the fourth quarter of fiscal 1988. The design of the treatment elements could proceed as early as the second quarter of fiscal 1989.

TASK CP-COMMUNITY RELATIONS PLAN

Community Relations Planning Support

The REM IV community relations staff will prepare a draft and final revised community relations plan (CRP) for the Northside/Enviro-Chem site. In accordance with U.S. EPA policy regulations and guidance, REM IV staff will conduct onsite interviews with residents and local officials identified by U.S. EPA or the state as part of the research and development of the revised CRP. The revised CRP will include the following:

- Site-specific updated description of community relations activities conducted during the remedial investigation and feasibility study stage
- Assessment of any changes in community concerns or involvement as a result of the select of a remedial alternative
- Community relations activities to be conducted for this site during remedial design and remedial actions
- Schedule of community relations activities as they coincide with technical events scheduled during the remedial design and remedial action, and
- Updated mailing list of federal, state, and local officials and interested residents and organizations

Community Relations Implementation Support

REM IV community relations staff will provide site-specific community relations support for the Northside/Enviro-Chem sites in accordance with Superfund community relations policy and Community Relations in Superfund: A Handbook (Interim

Version, September 1983. REM IV/ICF community relations staff will provide community relations implementation support up to the amount allocated in the budget. This support may include, but is not limited to, the following task:

- Preparation of a fact sheet describing the completion of the remedial design for the site
- Support to U.S. EPA in placing a newspaper advertisement announcing the completion of the remedial design
- Support to U.S. EPA in preparing for public meetings and/or availability sessions to explain the remedial design
- Prepare of periodic updates during construction at the site, and
- Performance of any REM IV administrative tasks necessary in executing community relations activities for the site

Development of community relations activities will be initiated at the request of the Region V Community Relations Coordinator. The schedule for planned activities will be determined jointly by the U.S. EPA Community Relations Coordinator and the REM IV/ICF Community Relations Specialist, and coordinated with the REM IV Site Manager.

GLT636/21

Table 1
DELIVERABLE REVISION PREDESIGN

Deliverables	Date
QAPP for Civil Engineering Tasks	11/23/87
QAPP for Bench Scale and Pilot Testing	01/11/88
Draft Civil Engineering Predesign	07/04/88
Final Civil Engineering Predesign	08/15/88
Draft Treatment Predesign	01/23/89
Final Treatment Predesign	03/06/89

GLT636/23

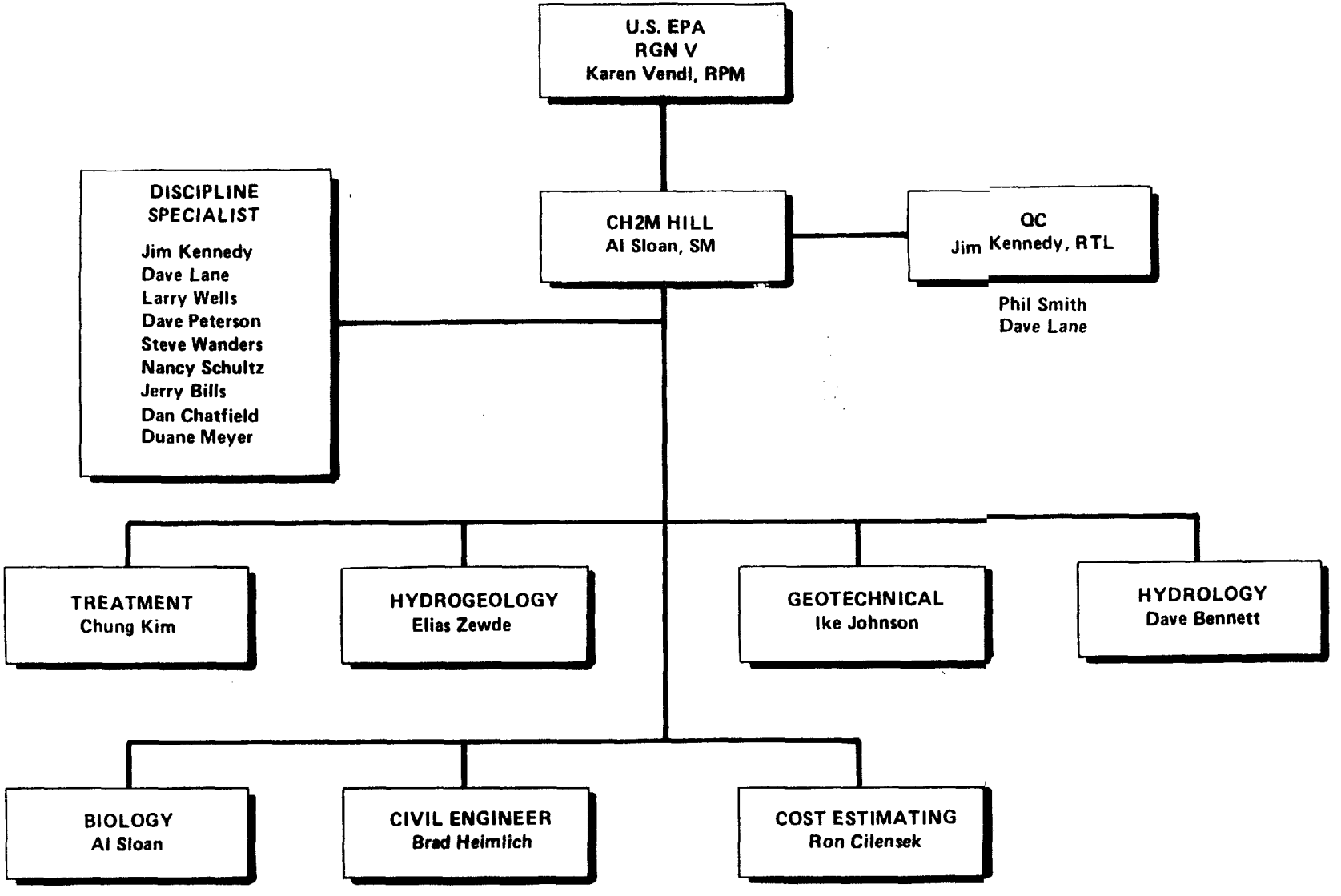

FIGURE 1
PRE DESIGN
ORGANIZATION CHART
NSL/ECC WPRR

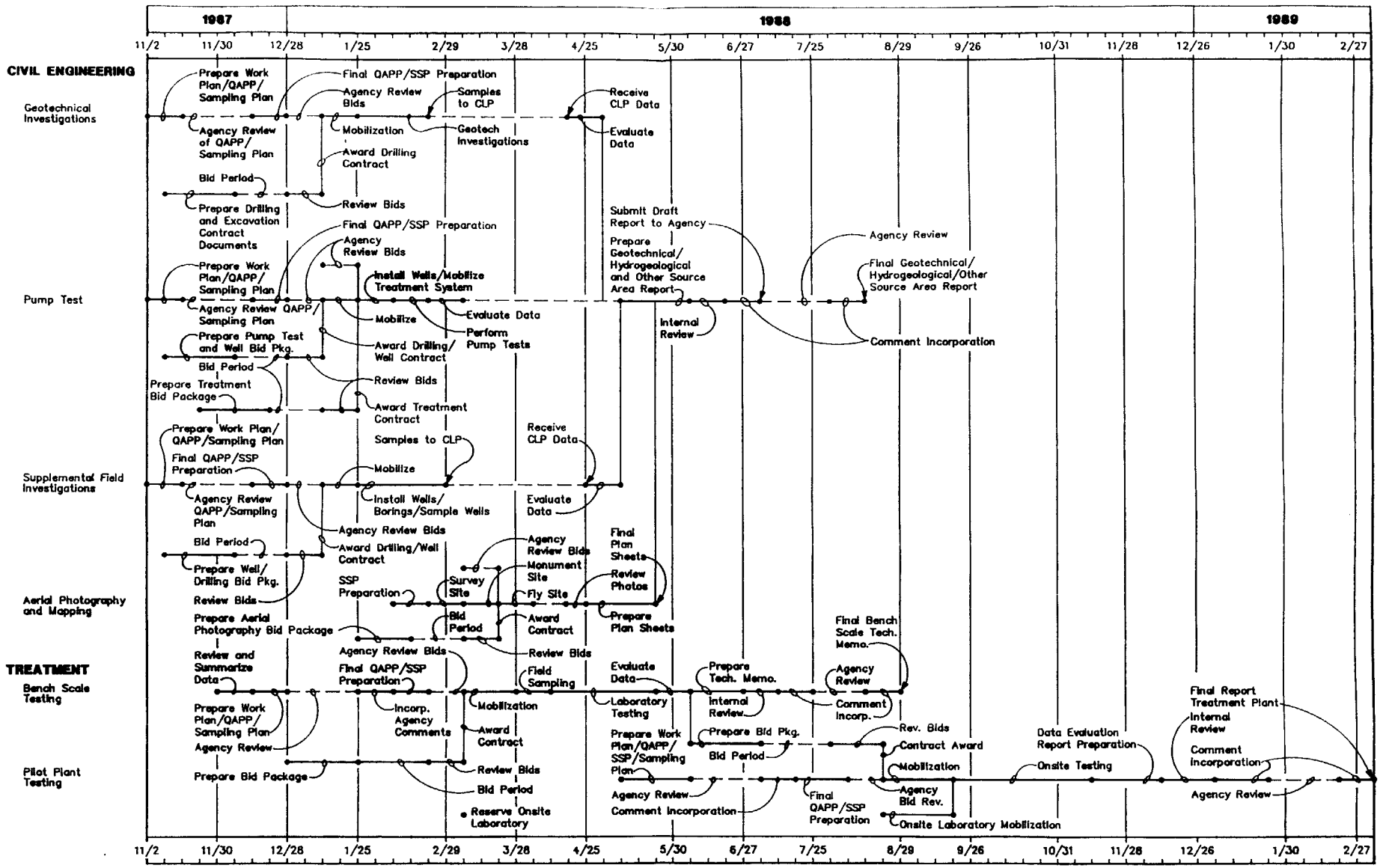

FIGURE 2
SCHEDULE
WORK PLAN REVISION
ENVIRO-CHEM PREDESIGN